Montana
Office of Public Instruction
Denise Juneau, State Superintendent
opi.mt.gov

Content Standards Informer

Curriculum and Instruction Unit

December 2011

MONTANA COMMON CORE STANDARDS: GETTING Every Student College and Career READY

On November 4, 2011, the Montana Board of Public Education adopted the Montana Common Core Standards for English Language Arts, Literacy in History/Social Studies, Science and Technical Subjects, Mathematics and Mathematical Practices. Information and resources are updated continually at http://opi.mt.gov/MontanaCommonCoreStandards.

Montana Common Core Standards and Assessments Getting Ready Every Montana Student College and Career

Welcome to Getting Ready, a site with information and resources for transition to the Montana Common Core Standards and The SMARTER Balanced Assessment Consortium.

Montana Common Core Standards

English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects

Montana Common Core Standards English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects **Grade-Level K-12**

Montana Common Core Standards English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects **Grade-Band K-12**

Appendix A: Research Supporting Key Elements of the Standards Glossary of Key Terms

Appendix B: Text Exemplars and Sample Performance Tasks

Appendix C: Samples of Student Writing

Mathematics

Montana Common Core Standards Mathematical Practice and Content **Grade-Level K-12**

Montana Common Core Standards Mathematical Practice and Content **Grade-Band K-12**

Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards

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Overview and Implementation Workshops for Montana Common Core Standards

The response to the overview and implementation workshops held by the Office of Public Instruction (OPI) in November and early December 2011 has been overwhelming. Over 375 teachers, administrators and curriculum directors have participated. Over 150 of those attending completed a second day of learning how to facilitate the workshops in their local school and for other schools in their region. Additional overview and implementation workshops will be scheduled by the OPI as needed.

To find a Montana Common Core Standards facilitator in your region, contact the Regional Service Area (RSA) directors listed below. If you are uncertain as to your region, click here and you will be directed to the OPI Web page with a map and full contact information for the regions.

Region I

PESA Kim Stanton (406) 377-6489 E-mail: pesa@midrivers.com

Region II

MNCESR Gaye Genereux (406) 378-3136 E-mail: gayegenereux@yahoo.com

Region III

MRESA3 Marsha Sampson (406) 896-2085E-mail: msampson@msubillings.edu

Region IV

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Region V

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Early Grades

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A high-quality physical education program is indisputably important, and so is ensuring that students are active across the school day and not just in gym class for 45 minutes—or worse, 20 minutes *every other day*. Research shows that kids who are physically active are not only healthier, but are also likely to perform better academically, and short activity breaks during the school day can improve concentration, behavior, and enhance learning. In short, school-based physical activity is valuable exercise—it aids cognitive development, increases engagement and motivation, and is essential to a whole child approach to education. In The Whole Child Podcast, *"PE, Recess, and Beyond: The Implications of Movement,"* experts in the field discuss the importance of physical activity for young children. http://whatworks.wholechildeducation.org/podcast/pe-recess-and-beyond-the-implications-of-movement

Library-Information Literacy

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Ezra Jack Keats Foundation Now Accepting Online Submissions for Minigrant Award

This year marks the 24th annual call for grant proposals by the Ezra Jack Keats Foundation. The Foundation, established by renowned author and illustrator Ezra Jack Keats, has awarded over half a million dollars in grants to public schools and libraries in all 50 states and the U.S. Commonwealth since 1987. The deadline for submission of proposals for the $500 Minigrant award is March 15, 2012. Proposals will be read directly after the March deadline, and winners will be announced starting on May 15. Decisions will be e-mailed to all applicants after May 15. All Minigrant applications are available exclusively online at the Foundation's Web site and must be submitted electronically. The foundation also offers a video tutorial explaining the process on its Web site.

The ALA Public Programs Office is now accepting nominations for the 2012 Sara Jaffarian School Library Program Award for Exemplary Humanities Programming. School libraries, public or private, that served children in any combination of grades K-8 and conducted humanities programs during the 2010-2011 school year are eligible. Applications and award guidelines are available at www.ala.org/jaffarianaward. To be considered, nominations must be received by the ALA Public Programs Office by December 15.

The award consists of a $4,000 honorarium and a plaque, to be presented at the 2012 ALA Annual Conference in Anaheim. Additionally, the winning program will be promoted as a model program for other school libraries on www.ProgrammingLibrarian.org, a library programming resource center.

To be considered, applicant libraries must have conducted a humanities program or program series during the prior school year (2010-2011). The humanities program can be focused in many subject areas, including, but not limited to social studies, poetry, drama, art, music, language arts, foreign language and culture. Programs should focus on broadening perspectives and helping students understand the wider world and their place in it. They should be initiated and coordinated by the school librarian and exemplify the role of the library program in advancing the overall educational goals of the school.

To find inspiration for your application, view an archived presentation of the 2011 Jaffarian Award winner's program, "Harmony with Voice":

http://www.programminglibrarian.org/blog/2010/august/qanda-with-nicolette-vaillancourt-2010-jaffarian-award-winner.html With questions, please contact the ALA Public Programs Office, publicprograms@ala.org or 800-545-2433 x5045.

Communication and Collaboration

SLMD Listserv – please e-mail Colet Bartow (cbartow@mt.gov) if you would like to be added to this highly informative listserv. You can also visit the Montana Teacher-Librarian wiki (http://www.opi.mt.gov/groups/mtl) for more information and resources useful to Montana schools. Check out new resources for assessment, automation and facilities.

Mathematics

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***Imagine Tomorrow* competition**
May 18-20, 2012
Washington State University, Pullman, Washington
***Imagine Tomorrow* builds a passion for learning**

The *Imagine Tomorrow* competition engages students in grades 9 – 12 in forging creative, carefully researched solutions to the world's energy challenges.

Since 2008, thousands of Washington state teenagers have competed in *Imagine Tomorrow*. In 2012, Imagine Tomorrow will also welcome students from Idaho, Montana, and Oregon.

Working in teams, students learn the power of collaboration. They see the real-world impact of solutions they create. For the first time, they realize the answer to the question: "Why do I have to learn this?" Students emerge with a new understanding of the importance of research—and the power they possess to tackle real-world problems.

Imagine Tomorrow marks some students' first visit to a university campus and motivates many to attend college.

Awards

Over $100,000 in cash awards will be awarded to student competitors and their schools, including up to 17 awards to newly participating schools. In all, more than 65 cash awards will be presented to student teams and their schools.

Adding a new challenge in 2012: Biofuels

Imagine Tomorrow is adding Biofuels to the menu of challenges that contestants may address. Other challenges—Behavior, Design, and Technology—ask students to consider energy problems from the perspective of different disciplines.

Registration

Registration will open March 1 and close April 2. Only 175 teams may compete, so don't wait. The time for students to begin working on their projects is now. There is no entry fee and housing and dining expenses on campus are covered for student team members, their advisors and chaperones.

For full details, go to imagine.wsu.edu, or contact Tena Old at imagine@wsu.edu, or call (509) 335-1467.

Science

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Montana Named as a Lead State in the Writing of the Next Generation Science Standards

On November 29, 2011 Superintendent Denise Juneau announced that Montana would join 25 other states to begin the writing process of the Next Generation Science Standards. The *Next Generation Science Standards* (NGSS) is a shared effort that will clearly define the content and practices all students will need to learn from kindergarten through high school graduation.

Superintendent Juneau stated, "We know that many of the jobs of tomorrow are going to require our students to have a solid background in science, technology, engineering and math, and we need to make sure their education in our public schools is preparing them for higher education and to compete for jobs in a global economy."

American students continue to lag internationally in science education, making them less competitive for the jobs of the present and the future. A recent U.S. Department of Commerce study shows that over the past 10 years, growth in Science, Technology, Engineering and Mathematics (STEM) jobs was three times greater than that of non-STEM

jobs. The report also shows that STEM jobs are expected to continue to grow at a faster rate than other jobs in the coming decade.

Partnering with the states are the National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve, who is facilitating the collaboration.

The 26-state partners will guide the standards writing process, gather and deliver feedback from state-level committees and come together to address common issues and challenges. Montana's committee will be made up of approximately 30 members, including K-12 and post-secondary educators, business and industry representatives, state agencies and non-profits.

Superintendent Juneau continued, "This is an opportunity for Montana to ensure the voices of rural states and their unique challenges are at the table as these new science standards are developed. We are looking forward to bringing a diverse group of stakeholders together to provide feedback on the future of science education."

States included in this effort include: Arizona, Arkansas, California, Delaware, Georgia, Illinois, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, New Jersey, New York, North Carolina, Ohio, Oregon, Rhode Island, South Dakota, Tennessee, Vermont, Washington and West Virginia. These 26 states represent more than 50 percent of the nation's students.

The NGSS should be completed by the end of 2012.

For more information about this work, visit the Next Generation Science Standards Web site at www.nextgenscience.org.

The DuPont Challenge Science Essay Competition is now open: Deadline is January 31, 2012

A total of $100,000 in prize money and a special award trip to Orlando, Florida for the top three students in each division is more than enough reason to compete in the DuPont Challenge Science Essay Competition! The deadline for submission is January 31, 2012, so get your essays started now! The following link gives you all the information you'll need: http://thechallenge.dupont.com/rules/.

Attention Middle School Educators: Christopher Columbus Awards Deadline: February 6, 2012

The Christopher Columbus Awards is a national, community-based science, technology, engineering and math (STEM) program for middle school students. The program challenges the students to work in teams of three to four, with an adult coach, to identify a problem in

their community and apply the scientific method to create an innovative solution to that problem.

Eight finalist teams and their coaches will receive an all-expense-paid trip to Walt Disney World to attend National Championship Week and compete for valuable U.S. Savings Bonds and the $25,000 Columbus Foundation Community Grant, plus a $200 development grant to further refine their idea.

For more information about this tremendous opportunity, go to the following link: http://www.christophercolumbusawards.com/

Regional Service Area II Opportunities

GRANT OPPORTUNITY

Funds are now available for science students, teachers, and their mentors in Region II of North Central Montana through the Dr. David W. Baker Memorial Student-Science Foundation.

A locally organized and managed newly formed nonprofit organization: *The Dr. David W. Baker Memorial Student-Science Foundation provides financial support for middle and high school students and/or their mentors to pursue science-oriented scholastic activities and projects that enhance the basic school curriculum.*

Grant applications will be processed promptly for students' benefits as long as funds are available. Therefore, we encourage you to take advantage of this opportunity for students in Region II of North Central Montana.

Specific information about the Dr. Baker Foundation, criteria to qualify for financial support, plus funding application forms can be found, completed, and submitted from our Web site at: www.doctorbakerscienceforkids.org.

Region II Workshop

Montana North Central Educational Service Region (MNCESR) is offering a workshop entitled "Student Research Project Workshop--A Best Approach to Teaching Inquiry Science" on January 6th and 7th at the College of Technology, rooms G45/46 in Great Falls. This workshop will cover the essential skills and knowledge a teacher should have at all grade levels to help a student complete a successful inquiry project and have fun doing it. A main objective of this approach is to get kids involved in a "hands-on" approach to inquiry science that improves creative and critical thinking and problem solving skills which in turn lead to important life skills. The workshop will run from 2:00-8:00 p.m. on Friday and 8:00-5:00 p.m. on Saturday. OPI renewal units will be offered as well as a continuing education college credit. Bill Peterson and Larry Fauque, former science fair coaches and directors, will facilitate the training.

E-mail flyers will be sent to all schools in the MNCESR region of north central Montana. Please contact MNCESR Director Gaye Genereux at 378-3136 or gayegenereux@yahoo.com for further information and to register.

The 2012 National STEM Video Game Challenge- Deadline is March 12, 2012

The STEM Video Game Challenge was launched in partnership with Digital Promise, a new initiative created by President Obama and the U.S. Congress, supported through the Department of Education. The initiative is designed to unlock the promise of breakthrough technologies to transform teaching and learning.

Entrants have until March 12, 2012, to submit their ideas and games. The contest is open to students and game designers in four levels: middle school, high school, college and graduate students, and educators.

Inspired by the Educate to Innovate Campaign, President Obama's initiative to promote a renewed focus on Science, Technology, Engineering, and Math (STEM) education, the National STEM Video Game Challenge is a multi-year competition whose goal is to motivate interest in STEM learning among America's youth by tapping into students' natural passion for playing and making video games.

This is a terrific opportunity for Montana students to try their hand at creating a video game around STEM. For more information, visit STEM Video Game Challenge. To view video clips of previous winners, visit the following link: National STEM Video Game Challenge Videos.